

15



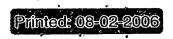


## IAP15 Rec'd PCT/PTO 03 APR 2006

## CLAIMS

- 1. Machine for decorating a food product, in particular a cake (T) having at least one side surface and a top surface, with an ingredient in granular form (G).:
  - a support structure (2);
- distribution means (3) mounted on said support structure (2) and able to project said ingredient in granular form (G) in at least one direction of flow;
- a support base (4) suitable for supporting said food product (T);
  - movement means (5) mechanically connected to said support base (4) so as to cause rotation of said food product (T) in the vicinity of said distribution means (3) and in such a way as to interfere with said flow so as to sprinkle said ingredient in granular form (G) over at least one portion of the surface of said food product (T);
- characterized in that said distribution means (3)

  comprise at least one rotor (31) provided with a plurality of radial blades (37), actuated by first motor means (32) and seated inside a housing (34) which has at least one supply mouth (35) for forming said flow of said granular ingredient (G);
- 25 and characterized in that said distribution means



10

15

20

25





- (3) can be moved by kinematic means (8) so as to assume several supply positions determined by their movement along at least one portion of the side or top surface of said food product (T).
- 2. Machine according to Claim 1, in which said movement means (5) comprise translation means (6) and rotation means (7), said translation means (6) being able to move said support base 4 between a rest position, for loading and unloading said food product (T), and an operating position in which said food product (T) is made to rotate by said rotation means (7).
  - 3. Machine according to Claim 2, in which said food product (T) has at least one side surface and a top surface and in which said distribution means (3) project said flow substantially over said side surface.
  - 4. Machine according to Claim 1, in which said movement along at least one portion of the side or top surface of said food product (T) is a translation which is substantially vertical and parallel to the side surface of said food product (T) so as to sprinkle said ingredient in granular form (G) over at least one portion of said side surface.
  - 5. Machine according to Claim 1, in which said each radial blade (37) comprises a first portion (38) which extends along the lie of a radial plane parallel to





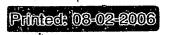
15





the axis of rotation and a second portion (39) which is inclined with respect to the first portion with a different inclination and orientation of adjacent blades so as to create a uniform flow along the whole extension of the supply mouth (35).

- 6. Machine according to any one of the preceding claims, in which said distribution means (3) are able to be moved towards or away from said side surface by means of adjustable positioning means.
- 7. Machine according to Claim 1, in which said kinematic means (8) comprise at least one linear actuator (81) mechanically associated with said distribution means (3) so as to cause movement thereof.
  - 8. Machine according to any one of the preceding claims, in which said support base (4) is composed of a plurality of arms (41) each connected at one end to a central transmission shaft (62) which receives its movement from said movement means (5).
- 9. Machine according to any one of the preceding claims, which can be inserted in particular along a line for production of said food product and which comprises transportation means (100) for conveying said food product (T) from an entrance opening to an exit opening, causing said food product (T) to pass in the vicinity of said distribution means (3).



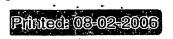
10

15





- 10. Machine according to Claims 2 and 8, in which said support base (4) is able to receive from or transfer to said transportation means (100) said food product (T) when it is in said rest position and in which said support base (4) is raised with respect to said transportation means (100), not interfering therewith when it is in said operating position.
- 11. Machine according to Claim 10, having stopping means situated in the vicinity of said support base (4) so as to allow stoppage and loading of said food product (T) onto said support base (4).
- 12. Machine according to Claim 1 or 3, comprising a screening element (9) for protecting said top surface of said food product (T) from the flow of said ingredient in granular form (G).
- 13. Machine according to Claim 12, in which said screening element (9) comprises a box-shaped structure (91) provided with an opening (92) for receiving said food product (T) from the side of said top surface.
- 20 14. Machine according to Claim 12 or 13, comprising adjusting means (93, 94, 95) operating said screening element (9) so as to vary the screened surface area of said food product (T).
- 15. Machine according to any one of the preceding claims, provided with a system for collecting said



10

15





ingredient in granular form (G) which has not adhered to the surface of said food product (T) after being projected by said distribution means (3).

- 16. Machine according to Claim 15, in which said collecting system consists of at least one extractable drawer situated underneath said support base (4).
- 17. Machine according to any one of the preceding claims, provided with a system for supplying said ingredient in granular form (G), comprising at least one hopper (50) and at least one conveying channel (51) connected at a first end to said hopper (50) and at its second end to said distribution means (3).
- 18. Machine according to claim 17, in which said conveying channel (51) conveys said ingredient in granular form (G) to a funnel (52) connected to a supply opening (36) of said rotor (31).
- 19. Machine according to Claim 17 or 18, in which said conveying channel (51) is a vibrating surface.

